Contra Costa County
Public Works
Department

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Memo

TO: Engineering Services Staff

DATE: September 1, 2008

FROM: Gary Huisingh, Assistant Public Works Director, Engineering Services Division

SUBJECT: Unit Prices Guide for Improvement Bond Estimates **(ENGLISH UNITS)**

FILE: POL: 44 – Improvement Bond Estimate, English Units

These unit prices have been updated to reflect more current costs. The following unit prices should be used for all improvement cost estimates submitted to our office after September 1, 2008.

Please be advised that these estimates are based on the County's cost of doing the work - not the developer's cost. **When small quantities are involved, higher prices should be used.** In all cases, these unit prices should be used as a guide and with good engineering judgment (consult with your supervisor if you have reason to believe that a unit cost outside of this guide should be used).

The Engineer's estimate shall be formatted with the following categories and sub-categories as appropriate:

PUBLIC ROAD INFRASTRUCTURE

(sub-categories would include: public roads, public bridges, and traffic signals). This category would include all inspected items associated with public roads, typical.

PUBLIC DRAINAGE INFRASTRUCTURE

(sub-categories would include: earthen drainage facilities, concrete drainage facilities, RCP, CIPP, plastic pipe, and CMP). This category would include all inspected items associated with public storm drainage, typical.

PRIVATE ROAD INFRASTRUCTURE

PRIVATE DRAINAGE INFRASTRUCTURE

STORMWATER TREATMENT FACILITIES (PRIVATE)

SUB TOTAL

CONTINGENCY

(Note: For difficult working conditions (i.e. steep grades, narrow roads, etc.) or jobs under $200,000.00, use 20%, otherwise use 10%)

TOTAL ESTIMATED COST of IMPROVEMENTS

(rounded to even $1,000 for bonding purposes)

Road Infrastructure

ITEMS	UNIT PRICE ($)	UNIT
1. Roadway Excavation (only when not included in grading bond) 0 - 1,000 CY 1,000 CY or more	 125 - 190 50 -125	 CY CY
2. Finish Grading within Right of Way	0.30 - 0.36	SF
3. Remove Existing Pavement (Obliteration)	0.24	SF
4. Sawcut Existing Pavement/Concrete	1.50	LF
5. Aggregate Base (Class 2, assume 145 lbs/CF) 0 – 1,000 TONS 1,000 TONS or more	 60 - 135 20 - 60	 TON TON
6. Asphalt Concrete (Type A, assume 150 lbs/CF) 0 – 1,000 TONS 1,000 TONS or more (Increase by 1% for each 1% over 10% grade)	 95 - 210 60 - 95	 TON TON
7. Reclamite	0.33 - 0.38	SY
8. Slurry Seal (includes aggregate and emulsified asphalt)	50	SY
9. Asphalt Concrete Dike 0 - 1,000 LF 1,000 LF or more	 13.50 6	 LF LF
10. Type "S1-6" Curb 0 - 1,000 LF 1,000 LF or more	 30 - 50 30	 LF LF
11. Median Curb (6-inch)	25 - 30	LF
12. Median Curb (8-inch)	30 - 35	LF
13. Sidewalk (includes 3" AB) 0 - 2,000 SF 2,000 SF or more	 20 15	 SF SF
14. Driveway Ramp (Minor Concrete, assume 20' wide x 5' deep)	900	EA
15. PCC Roadway (6" PCC over 6" AB)	15 - 20	SF
16. Median (Island) Paving	10 - 15	SF

ITEMS	UNIT PRICE ($)	UNIT
17. Pedestrian Curb Ramp (including curb and truncated domes)		
R = 20′	5,550	EA
R = 30′	6,000	EA
18. Concrete Structures may be estimated at	700	CY
19. Concrete Bridge Deck	150 – 200	SF
20. Wood or Masonry Retaining Wall	36.50	SF
21. Concrete Retaining Wall	50	SF
22. Street Light – Metal Pole		
0 – 10	25,000	EA
10 or more	10,000	EA
23. Survey (Street) Monument	1,000	EA
24. Street Sign (Name)	500	EA
25. Traffic Sign	500	EA
26. Metal Beam Guard Rail (wood post)	250	LF
27. Guard Rail - End Anchor Assembly	3,250	EA
28. Guard Rail – Alternate Flared Terminal End	3,500	EA
29. Fence		
4′ Chain Link	30	LF
6′ Chain Link	35	LF
30. Landscaping (including irrigation system)	10 - 35	SF
31. Thermoplastic Detail 2	1.00	LF
32. Thermoplastic Detail 9	0.60	LF
33. Thermoplastic Detail 22	1.50	LF
34. Thermoplastic Detail 27B	0.60	LF

Drainage Infrastructure

ITEMS	UNIT PRICE ($)	UNIT
1. Drainage Inlet		
Type A	2,800 – 5,000	EA
Type B	4,000 – 6,000	EA
Type C	2,700 – 4,000	EA
Type D	2,000 – 4,000	EA

Type E	2,500	EA
Type F	2,500	EA
If inlet is on manhole base, add		
Type I MH	1,000	
Type II MH	1,500	
Type III MH	2,000	
2. Storm Drain Manhole		
Type I	1,900 - 2,400	EA
Type II	2,500 - 3,700	EA
Type III	4,000 - 5,500	EA
(Add $250/ft. for depths over 6 ft.)		
3. Non-standard storm drain inlet (2' x 2')	1,000	EA
4. Concrete "V" Ditch (CD60, aka B58 ditch)	68 - 90	LF
5. Valley Gutter (Minor Concrete)	20	SF
6. Sidewalk Cross Drain (CD06, including 3" x 12" metal duct)	2,000	EA
7. Residential Sidewalk Drain (CD06, including 3" dia. pipe)	1,500	EA
8. Subsurface Edge Drain (CD08, 3" dia. pipe)	21 - 26	LF
9. CMP (if bit. coated add $1/LF)	6.50	$/in.dia./LF
10. Alternative Pipe (HDPE)	6.50	$/in.dia./LF
11. CIPP (30" dia. and over only)	2.00	$/in.dia./LF
12. RCP	4.75	$/in.dia./LF
13. All pipe in existing pavement or difficult area	8.00	$/in.dia./LF
14. Rock Slope Protection (assume Facing Class, Method B)		
0 – 10 TON	300	TON
10 – 200 TON	180	TON
more than 200 TON	100	TON
15. Type "M" Headwall (CD52)	2,600	EA
16. Drain Inlet Label ("No Dumping, Drains to...")	80	EA
17. Tie into Existing Storm Drain	1,500	EA
18. Stub / Plug	1,500	EA

Stormwater Treatment Facilities (Private)

ITEMS	UNIT PRICE ($)	UNIT
1. Sandy Loam (18" depth)	0.60	SF
2. Turf/Grass	0.50	SF
3. Shrubs		
1 Gallon	10	EA
5 Gallon	20	EA
4. Trees		
24" box	300	EA
15 Gallon	100	EA
5. Mulch (assume 3" depth)	0.45	SF
6. Class 2 Permeable Material		
Grassy Swale (18" W x 12" D)	15	$/LF of swale
Planters, bio-retention areas (12" D)	2.50	SF
7. Sub-drain (6" dia. perforated pipe)	40	LF
8. Irrigation	2.50	SF
9. Planter Box Walls		
Wood or Masonry	36.50	SF
Concrete	50	SF
10. Non-standard storm drain inlet (2' x 2')	1,000	EA
11. Drainage Inlet (Type C)	2,700 – 4,000	EA
12. Rock Slope Protection (assume Facing Class, Method B)		
0 – 10 TON	300	TON
10 – 200 TON	180	TON
16. Drain Inlet Label ("No Dumping, Drains to...")	80	EA